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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,390	09/11/2000	Pascale Corpart	RN97162G1	3489

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EXAMINER

MULLIS, JEFFREY C

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 01/13/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/582,390

Applicant(s)

CORPART ET AL

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

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All remaining rejections and/or objections follow.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29-53 are rejected under 35 U.S.C. § 102(b) as being anticipated by Himori et al. (EP 296850).

See the previous Office action at the paragraph bridging pages 3 and 4 et seq.

Claims 29-53 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tatsuya et al. (JP 04198303).

Tatsuya et al. disclose a macromolecular radical polymerization initiator comprising a polymer having "at either

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ends and/or in side chains thereof one or more groups of general Formula (7);" or (10). Note that Formula 10 on page 6 is a dithiocarbamate group. Note Example 30 on page 26 of the translation in which approximately 1 mole of sodium diphenyldithiocarbamate is added to 1 mole of a bromo terminated polypropylene glycol. Since only a single mole of sodium diphenyldithiocarbamate is added to the polypropylene glycol, the predominant product would be assumed by those skilled in the art to be a polypropylene glycol having a single diphenyldithiocarbamoyl group. Page 28 of the translation discloses that the material of Example 30 is polymerized with vinylic monomers. Admittedly page 28 of the translation indicates that the product resulting from such polymerization is an ABA type block copolymer. However as those skilled in the art will understand, a polypropylene glycol having 2 dithiocarbamate end units would have had to have been used to produce a triblock copolymer described and this is in contradiction to the disclosure of claim 30. In any case, as set out on page 6 as discussed above, patentees clearly disclose that only a single end unit may be present. Therefore it would have been obvious to a practitioner having ordinary skill in the art at the time of the invention to produce block copolymers by producing a polypropylene glycol having a single dithiocarbamate end unit based on the disclosure of patentees and in the expectation of

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adequate results absent any showing of surprising or unexpected results.

Applicants' arguments filed 10-9-02 have been fully considered but they are not deemed to be persuasive.

With regard to Himori et al., applicants argue that the language "radical polymerization initiator compound" distinguishes the process according to the invention over the process using radiation such as that of Himori et al. However Himori et al. refers to a "polymer initiator" at page 22 line 4. Applicants argue that the polydispersity of the materials produced by their process is narrower than that of Himori et al. However with regard to those claims not explicitly reciting a particular polydispersity, the issue of polydispersity is immaterial to patentability. With regard to those claims reciting a polydispersity of 2 or less, all the polydispersities shown in the Table or reproduced on page 10 of applicants' remarks are equal to 2 when expressed to the same number of significant figures as are present in applicants' claims.

With regard to Tatsuya et al., the Examiner appreciates the submission of the translation of the Japanese patent.

With regard to anticipation, it may well be true that Example 30 is the only example pertinent to anticipation in the patent. While it is true that patentees disclose that the product utilizing the product of Example 30 is a triblock

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copolymer, such a disclosure is contradictory to Example 30 given that the amount of diphenyldithiocarbamate used is sufficient to provide only a single dithiocarbamate end unit to the polypropylene glycol utilized. Therefore, it would appear that patentees were possibly in error and that the material prepared from the material of Example 30 was actually inherently a diblock copolymer. Whether or not the Examiner is correct about this, patentees clearly disclose that macromolecular initiators having a single dithiocarbamate end unit may be used given the disclosure that such dithiocarbamate groups may be at "either ends and/or side chains". Applicants argue that this disclosure is not relevant because it pertains to only initiator comprising groups of Formulas 7-9. The Examiner however does not agree with this since the "polymer having at either ends and/or in side chains thereof" appears at page 6 and precedes the disclosure of "or a general formula (10):". For this reason while the Examiner may well be incorrect that patentees inherently anticipate the claims by the disclosure of polymerization of the product of Example 30, it would appear nonetheless that at least patentees render the instant claims obvious. Applicants argue that the polypropylene glycol of Example 30 does not read on the block formula recited by the claims. The Examiner does not agree with this since the dithiocarbamate end unit of the macromolecular

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initiator produced by Example 30 would be attached to two CH₂ groups.

The Examiner appreciates applicants' submission of reference D4. The reference has been reviewed by the Examiner.

This Office action is not being made FINAL.

Any inquiry concerning this communication should be directed to Jeffrey Mullis at telephone number (703) 308-2820.

J. Mullis:cdc

January 12, 2003

Jeffrey Mullis
Primary Examiner
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